Application Data Sheet

Application Information

Application Type::	Regular
Subject Matter::	Utility
Title::	System for containing and processing small objects
Attorney Docket Number::	D-26
Request for Early Publication?::	No
Request for Non-Publication::	No

Applicant Information

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Domestic Priority Information

Application::	Continuity Type::	Parent Application::	Parent Filing Date::
This application	Non-Provisional of	60/387,821	7/23/2002

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Cross Reference to Related Applications

[000] This application is a Non-Provisional of U.S. Patent Application Serial No. 60/387,821 filed 7/23/2002 .

Field of the invention

[001] This invention relates to methods and apparatus for containing and processing small objects and more particularly, although in its broader aspects not exclusively, methods and apparatus for performing protein purifications manually, semi- automated, and fully automated operations.

Background of the invention

[002] Understanding gene function has become a major focus of life science and biotech/pharmaceutical research, and understanding proteins is central to understanding gene function. Numerous techniques may be used to purify proteins for analysis. See, for example: Protein Purification Techniques: A Practical Approach by Simon Roe (Editor, 2nd edition (April 2001) Oxford University Press; ISBN: 0199636745; Protein Purification: Principles and Practice by Robert K. Scopes, 3rd edition (January 1994) Springer Verlag; ISBN: 0387940723; and Protein Analysis and Purification : Benchtop Techniques by Ian M. Rosenberg, 1st edition (September 1996) Springer Verlag; ISBN: 0817637176.

[003] Life science and the study of proteins requires high throughput techniques. Immunoprecipitation and other affinity methods for protein activities require new tools to provide the needed high throughput. High throughput expression and purification of proteins is important in several areas of research, including in vitro study of protein-protein interactions, the study of protein complexes, high throughput screening of small molecule ligands against protein targets, creation of protein arrays, and high throughput structural genomics (protein structure via NMR and/or X-ray crystallography). These activities are performed in biotechnology and pharmaceutical companies, as well as in academic research.